Responsible Research and Innovation

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POLITECNICO DI TORINO

Outline della presentazione

- Cos'è la RRI-Responsible Research and Innovation

- Perché la RRI

- Le dimensioni tematiche della RRI

- RRI in H2020

    RRI in H2020: Science with and for society wp

    RRI in H2020 come" cross cutting issue" – esempi

- RRI : non solo in H2020

- RRI a Polito

- Prospettive

POLITECNICO DI TORINO

RRI - condividere le linee di sviluppo e le finalità della ricerca con i soggetti attivi della società

La RRI è un processo dinamico interattivo attraverso il quale tutti gli attori sociali (ricercatori, cittadini, policy maker, business, civil society organizations,...) lavorano insieme durante l'intero processo di ricerca e innovazione con l'obiettivo che il processo e i suoi risultati siano meglio allineati con i valori e le aspettative della società.

René Von Schomberg :

"**a transparent, interactive process by which societal actors and innovators become mutually responsive to each other with a view to the ethical acceptability, sustainability, and societal desirability of the innovation process and its marketable products in order to allow a proper embedding of scientific and technological advances in our society**".

GOVERNANCE   ENGAGED PUBLICS

YES, RESEARCH AND INNOVATION IS EVERYBODY'S BUSINESS!

Perché la RRI?

- 77% of Europeans believe that science and technology have a positive impact in society

- 62% agree that science makes our way of life change too fast

- 55% think that public dialogue is required when it comes to decisions made about science and technology

DK	72%	
SE	69%	
DE	66%	
MT	65%	
UK	64%	
LU	63%	
FI	62%	
EL	59%	
FR	58%	
CY	57%	
EU	55%	
EE	55%	
AT	55%	
ES	53%	
PT	51%	
IE	50%	
BG	50%	
BE	49%	
PL	48%	
NL	47%	
LT	47%	
IT	47%	
CZ	46%	
LV	45%	
HU	44%	
SK	43%	
RO	43%	
SI	40%	
HR	57%	

Question: QD6. What is the level of involvement citizens should have when it comes to decisions made about science and technology?

Answers: Public dialogue is required

Map Legend
- 60% - 100%
- 51% - 59%
- 0% - 50%

Source: Special Eurobarometer 401 on "Responsible Research and Innovation (RRI),Science and Technology", marzo 2013
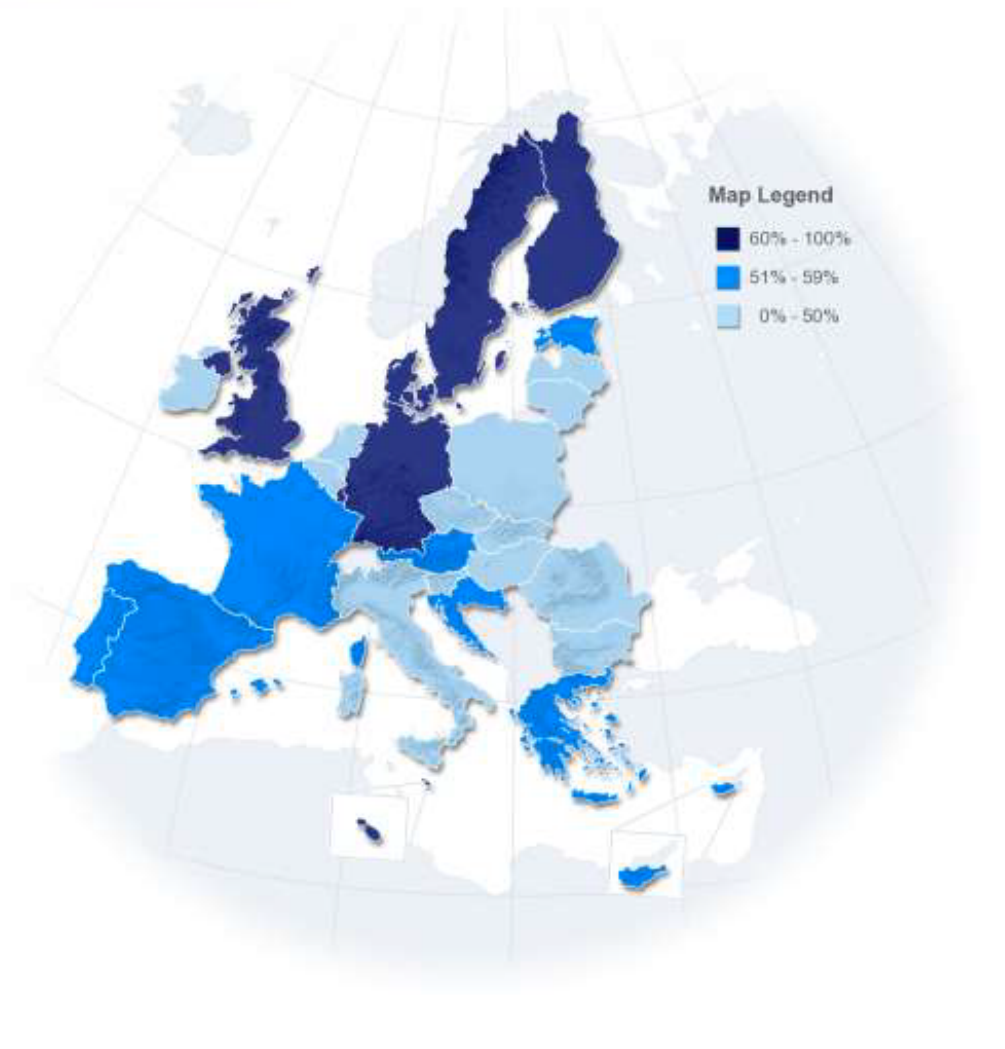
Le dimensioni tematiche (pillars) della RRI

PUBLIC ENGAGEMENT

GOVERNANCE

GENDER

SCIENCE EDUCATION

RRI

OPEN ACCESS

ETHICS

RRI IN H2020
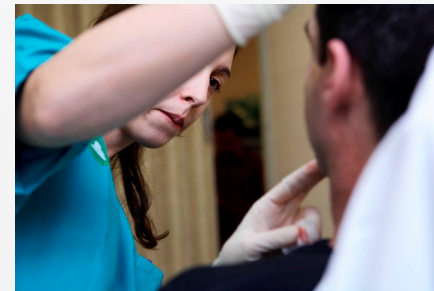
Responsible research and innovation is key action of the **'Science with and for Society'** objective.

RRI actions will be promoted via 'Science with and for Society' objective via:

- actions on thematic elements of RRI (public engagement, open access, gender, ethics, science education), and
- via integrated actions that for example promote institutional change, to foster the uptake of the RRI approach by stakeholders and institutions.

RRI is furthermore a **'cross-cutting issue' in Horizon 2020, which will be promoted throughout Horizon 2020 objectives.** In many cases, inter- and transdisciplinary solutions will have to be developed, which cut across the multiple specific objectives of Horizon 2020.

Within the specific objectives of programme, actions can focus on thematic elements of RRI, as well as on more integrated approaches to promote RRI uptake.

RRI IN H2020: SCIENCE WITH AND FOR SOCIETY WP

1- Institutional Change to Support Responsible Research and Innovation in Research Performing and Funding Organisations

SwafS-01-2016: Participatory research and innovation via Science Shops
SwafS-02-2016: ERA-NET Cofund – Promoting Gender equality in H2020 and the ERA 12
SwafS-03-2016-2017: Support to research organisations to implement gender equality plans
SwafS-04-2016: Opening Research Organisations in the European Research Area
SwafS-05-2017: New constellations of Changing Institutions and Actors
SwafS-06-2017: Engaging industry – Champions for RRI in Industrial Sectors
SwafS-07-2016: Training on Open Science in the European Research Area
SwafS-08-2017: European Community of Practice to support institutional change

2. Embedding Responsible Research and Innovation in Horizon 2020 Research & Innovation

SwafS-09-2016: Moving from constraints to openings, from red lines to new frames in Horizon 2020
SwafS-10-2017: Putting Open Science into action

3. Strengthening the Science with and for Society Knowledge-Base

SwafS-11-2017: Science education outside the classroom
SwafS-12-2017: Webs of Innovation Value Chains and Openings for RRI
SwafS-13-2017: Integrating Society in Science and Innovation – An approach to co-creation
SwafS-14-2017: A Linked-up Global World of RRI

4. Developing Inclusive, Anticipatory Governance for Research & Innovation

SwafS-15-2016: Open Schooling and collaboration on science education
SwafS-16-2016: Mapping the Ethics and Research Integrity Normative Framework
SwafS-17-2016: The Ethics of informed consent in novel treatment including a gender perspective
SwafS-18-2016: The Ethics of technologies with high socio-economic impact and Human Rights relevance
SwafS-19-2016: Networking of National representatives and resources centres on Gender in R&I SwafS-20-2016: ERA Mobility and Career Day
SwafS-21-2017: Promoting integrity in the use of research results in evidence based policy: a focus on non-medical research.
SwafS-22-2017: The ethical dimensions of IT technologies: a European perspective focusing on security and human rights aspects
SwafS-23-2017: Responsible Research and Innovation (RRI) in support of sustainability and governance, taking account of the international context
SwafS-24-2017: Trans-national operation of the EURAXESS Service network
SwafS-25-2016: Celebrating European Science SwafS-26-2017: Science4Refugees - Support to highly skilled refugee scientists
SwafS-27-2017: Implementing a European Train-the-trainers initiative with regard to Ethics and Research Integrity

NMBP-12-2017: Development of a reliable methodology for better risk management of engineered biomaterials in Advanced Therapy Medicinal Products and/or Medical Devices

*...This project should is expected to support good governance in biomaterials research following the **safe, integrated and responsible approach** as laid down in "Nanosciences and Nanotechnologies: An action plan for Europe".*

Marie Skłodowska-Curie, Work Programme 2016-2017

*All applicants to the Marie Skłodowska-Curie calls are encouraged to **adopt an RRI approach** into their proposals.*

FETPROACT-01-2016: FET Proactive: emerging themes and communities, H2020

*A **Responsible Research and Innovation approach**, including aspects of ethics, as well as social science and humanities **should be taken into account**.*

RRI : NON SOLO IN H2020

Fondazione Cariplo, Bando ricerca integrata sulle biotecnologie industriali
*… Inoltre la Fondazione Cariplo intende promuovere iniziative
che, in un'ottica di Ricerca e Innovazione Responsabile (RRI), prevedano la
realizzazione di attività di dialogo con la società civile.*

Programma Nazionale della Ricerca 2015-2020
*Il Programma Nazionale della Ricerca ha l'obiettivo di garantire la
rendicontabilità sociale della ricerca, assicurando apertura, libero accesso ai
risultati e responsabilità.*

RRI A POLITO

- Da settembre 2015: elementi di personale dedicato agli aspetti Comunicazione, Disseminazione e RRI presso l'Area Ricerca (ora due elementi di personale)

- Agosto 2016: Approvazione di un progetto interno con budget dedicato "Valorizzare la ricerca e l'ambiente di ricerca"

- Workshop RRI nelle nanoscienze e nanotecnologie
    14 giugno 2016, gruppi di lavoro su ethics, governance e public engagement

- Supporto ai ricercatori che presentano proposte su comunicazione e disseminazione: invito a considerare gli aspetti RRI, specialmente nelle call in cui è rilevante

- Aspetti etici nei progetti H2020 e PhD training su Ethics e Research Integrity (2017)

- Partecipazione al gruppo di lavoro sulla RRI di Cesaer (the Conference of European Schools for Advanced Engineering Education and Research)

- Partecipazione di personale dell'Area Ricerca ai workshop organizzati in Italia da Fondazione Cariplo nell'ambito del progetto EU RRITools

- Partecipazione dell'Area Ricerca a due proposte H2020 su RRI
SwafS-04-2016: Opening Research Organisations in the European Research Area
SwafS-09-2016: Moving from constraints to openings, from red lines to new frames in Horizon 2020.

PROSPETTIVE

- RRI in FP9?

- Testimonianza dell'Università di Roma – La Sapienza

- Discussione su esperienze in altre università italiane

- Gruppo di lavoro su RRI e Comunicazione della Ricerca in H2020 – manifestazioni di interesse a europoli@polito.it